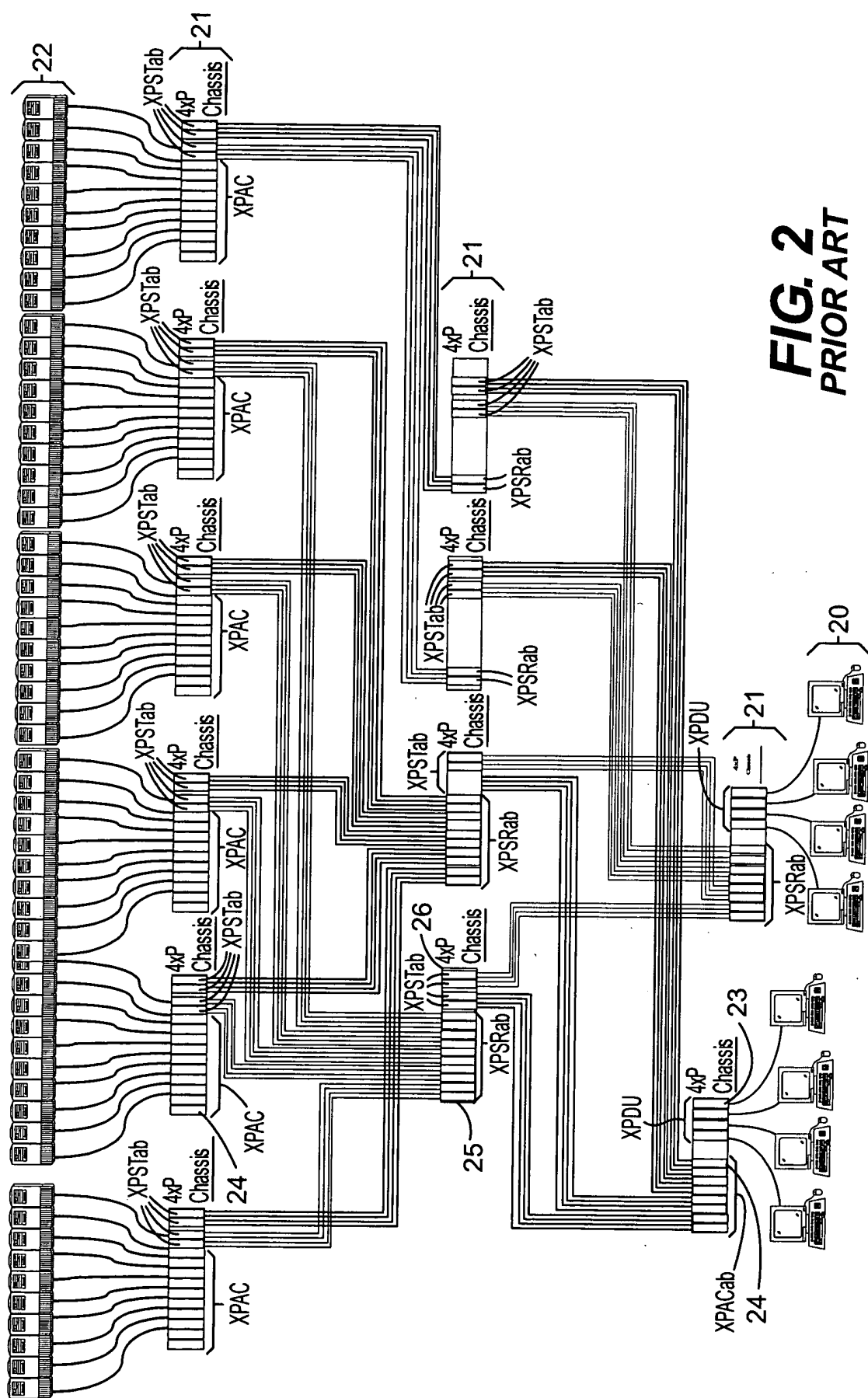
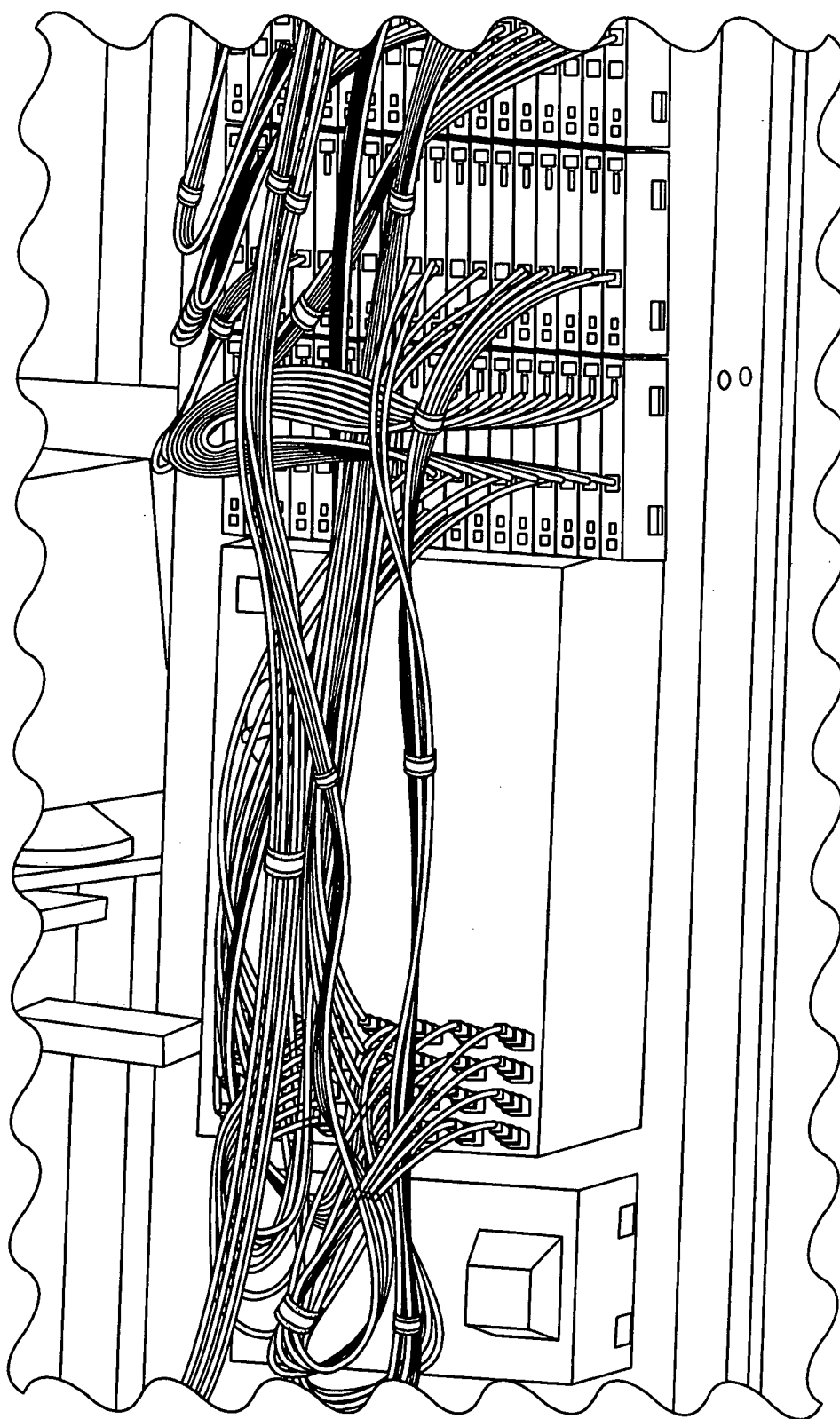


INDUSTRY MARKET CONSORTIUM	WIFI			
IEEE STANDARD	802.11	802.11B	802.11A	802.11G
FREQUENCY BAND	2.4 GHZ	2.4 GHZ	5 GHZ	2.4 GHZ
DATA RATE (MBPS)	1 TO 2 Mbps	UP TO 22 Mbps	UP TO 54 Mbps	UP TO 54 Mbps
NON-OVERLAPPING CHANNELS	3	3	4 + 4	3
MODULATION TYPE	FHSS	DSSS	OFDM	OFDM
BOM COST TO MANUFACTURER	N/A \$300 IN 1998	\$25 2004 EST. \$20	\$35 2004 EST. \$25	\$35 2004 EST. \$25
TYPICAL RANGE	50 METERS	50 METERS	20 METERS	50 METERS
CURRENT DRAIN (mA)	<350mA	<350mA	<350mA	<350mA

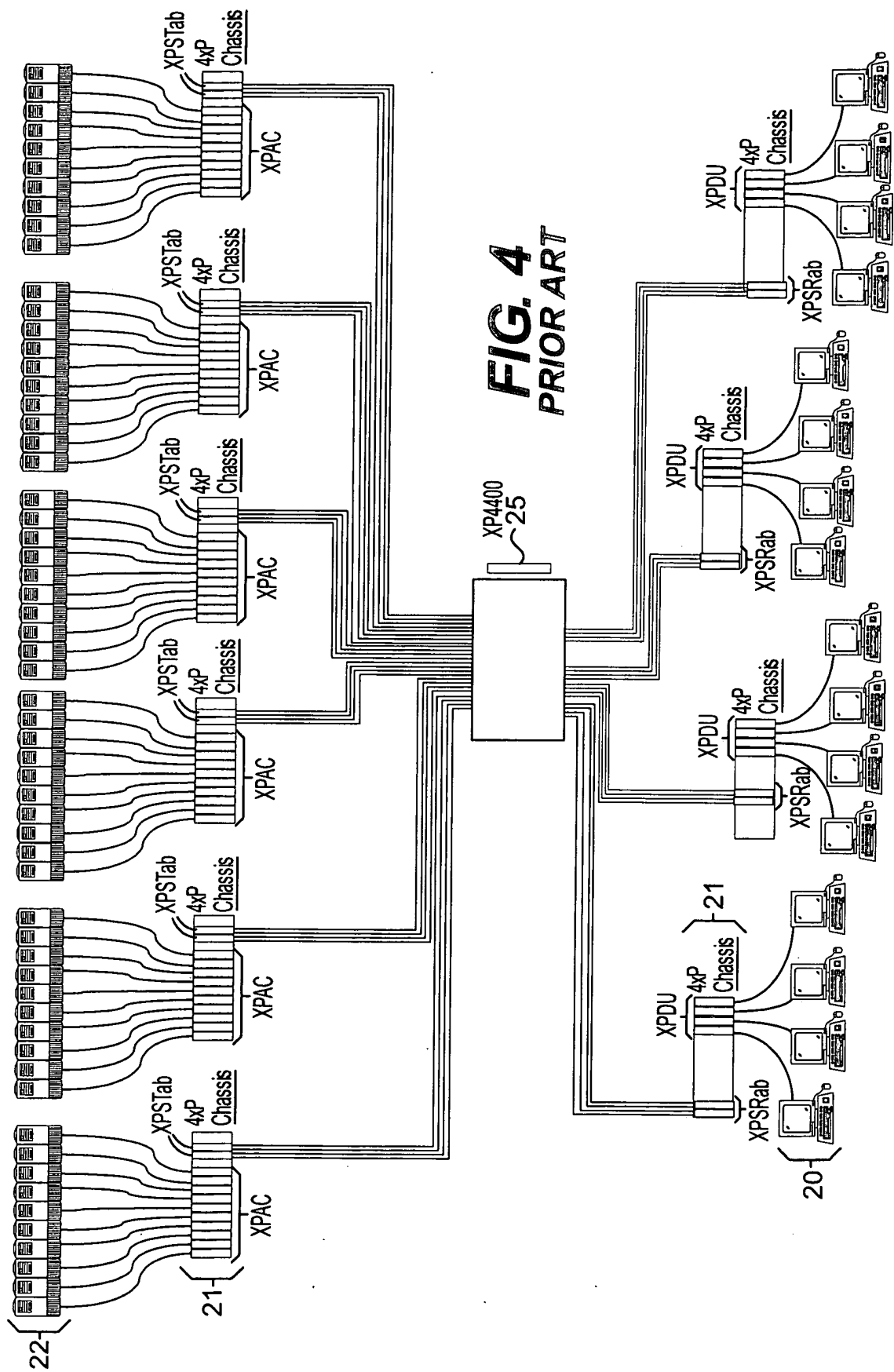
**FIG. 1**

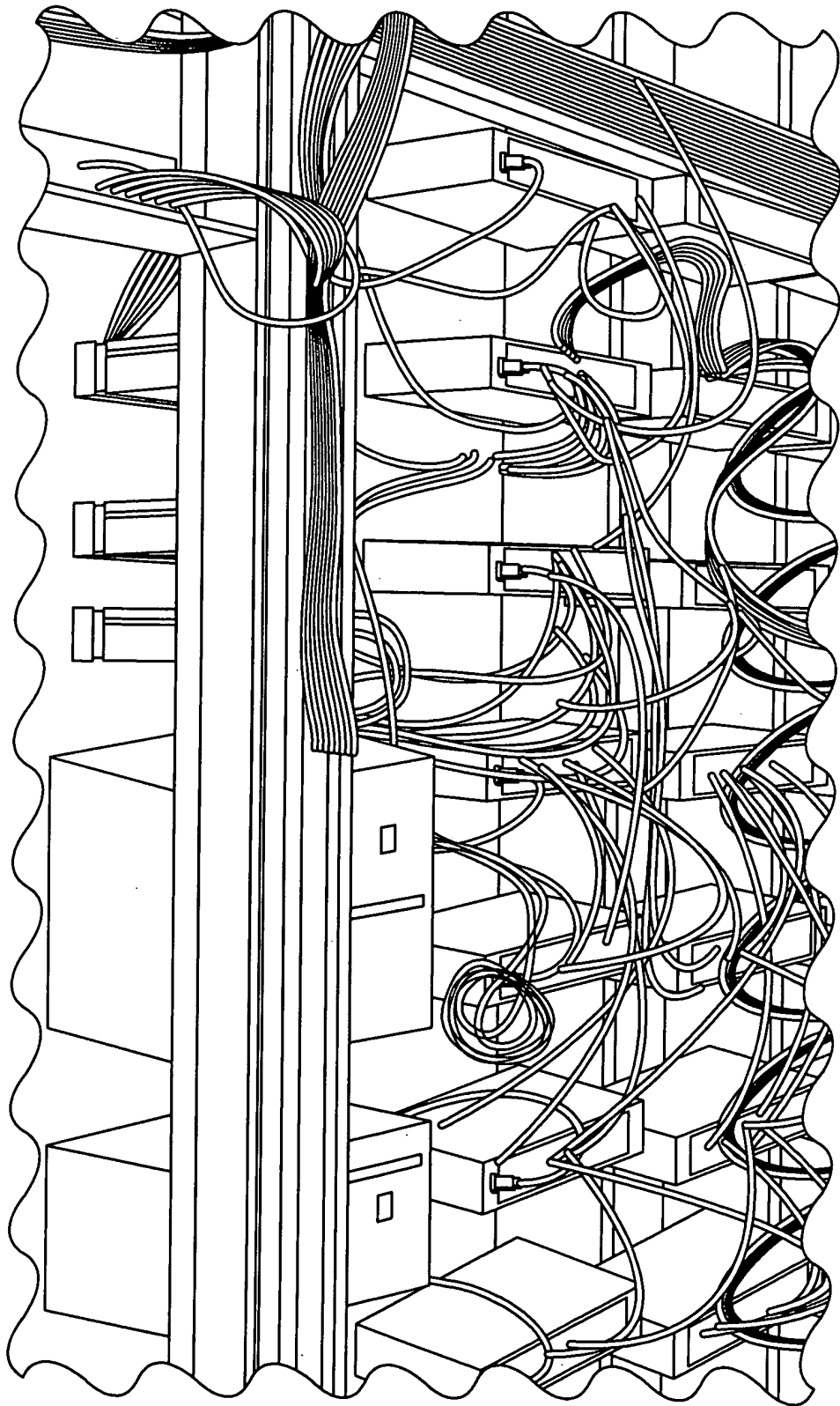


**FIG. 2**  
**PRIOR ART**

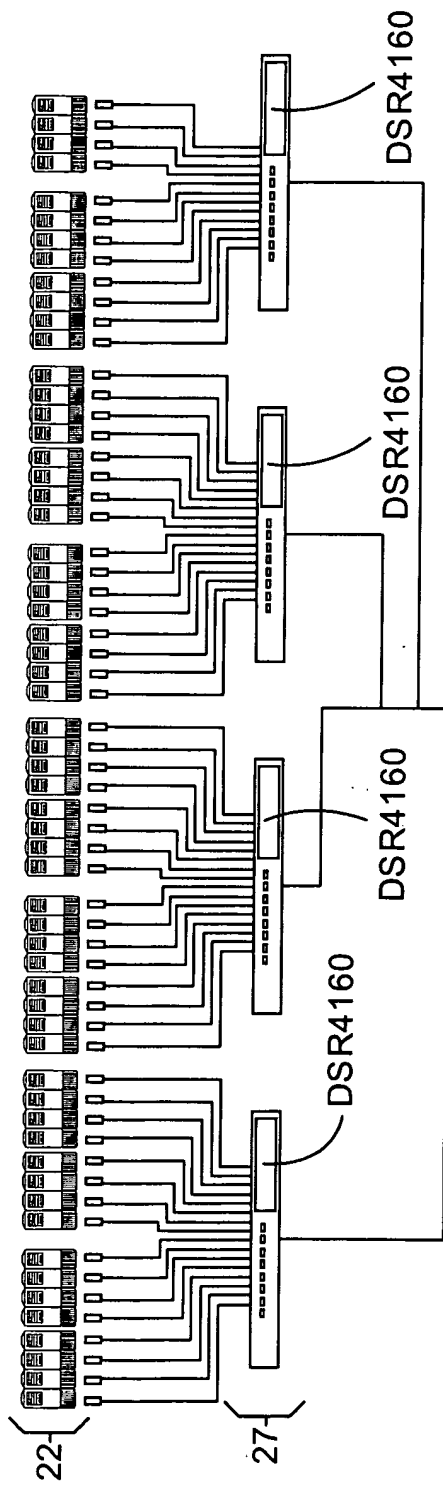


**FIG. 3**  
**PRIOR ART**

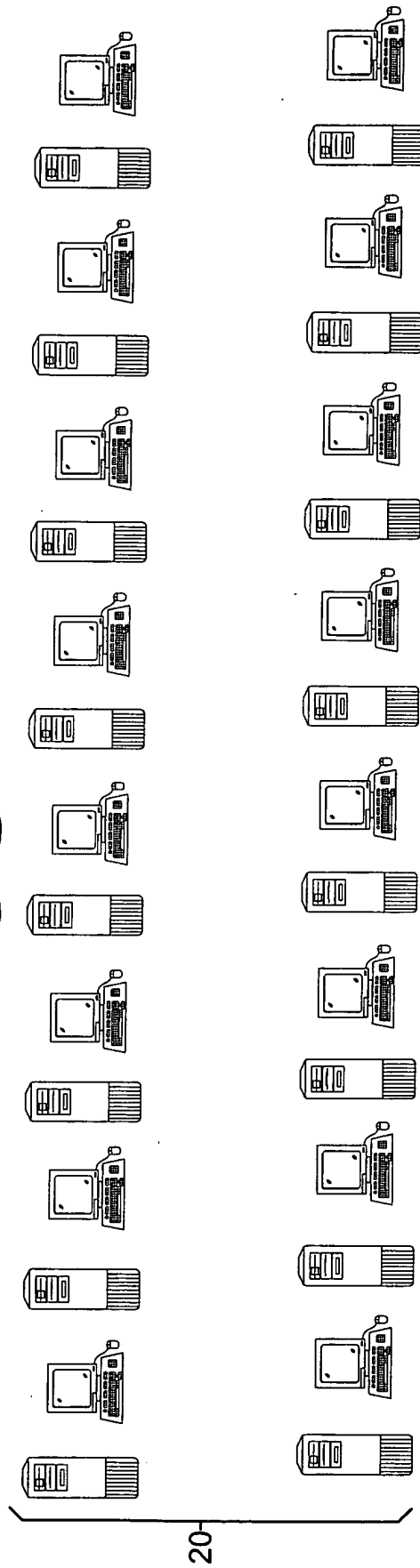
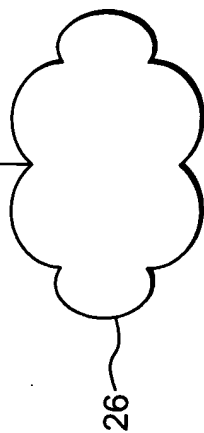


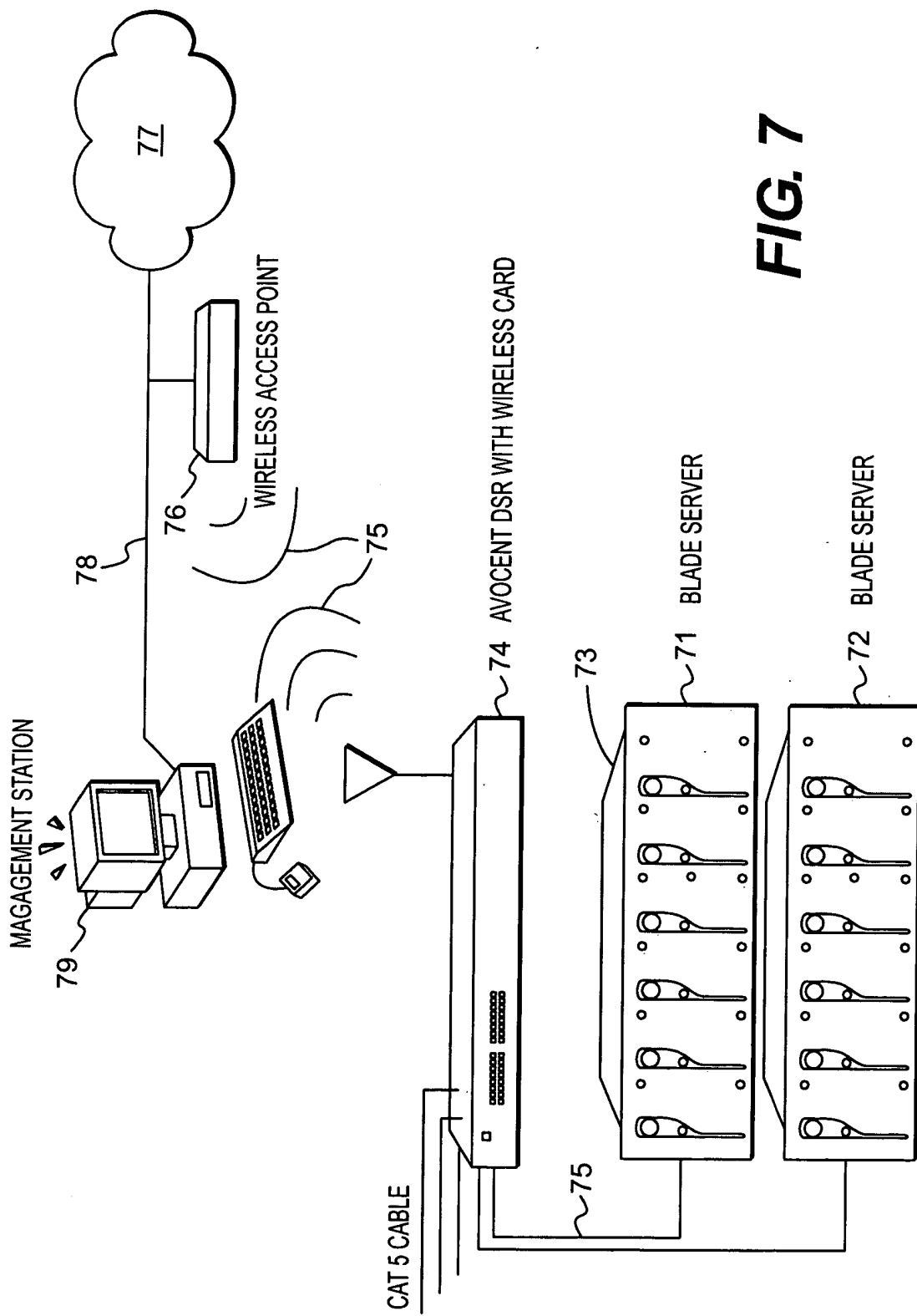


**FIG. 5**  
**PRIOR ART**

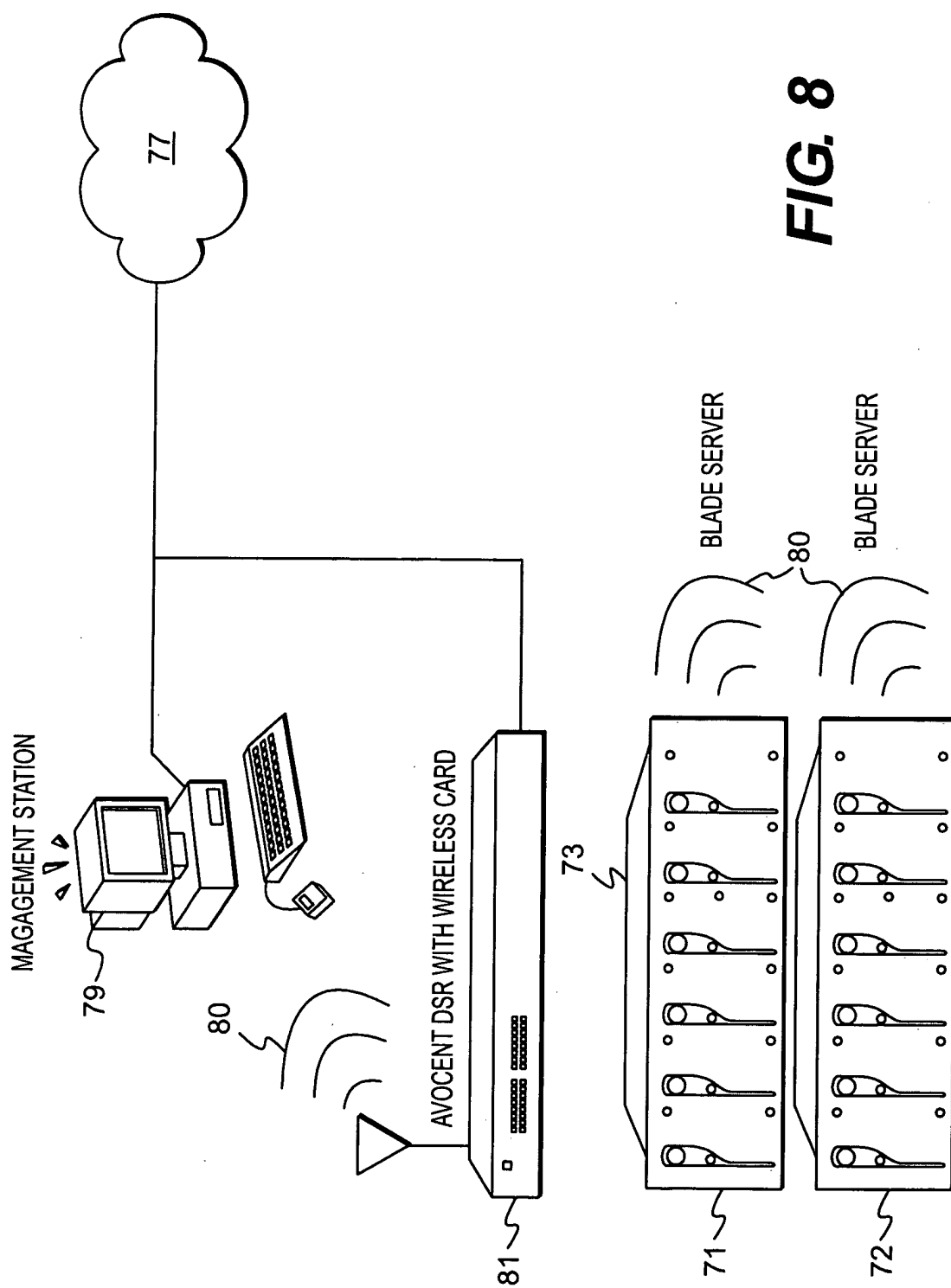


**FIG. 6**  
**PRIOR ART**



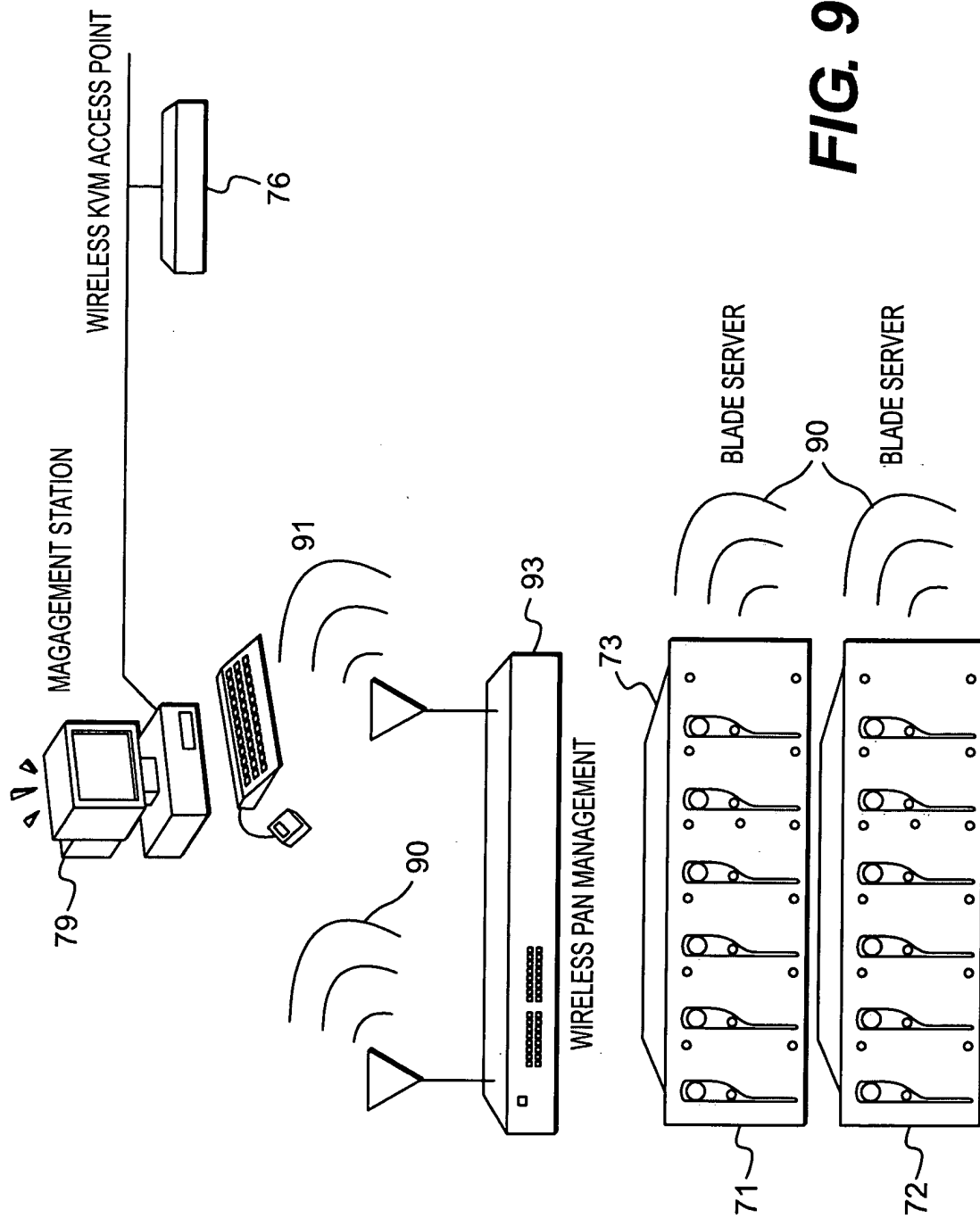


**FIG. 7**

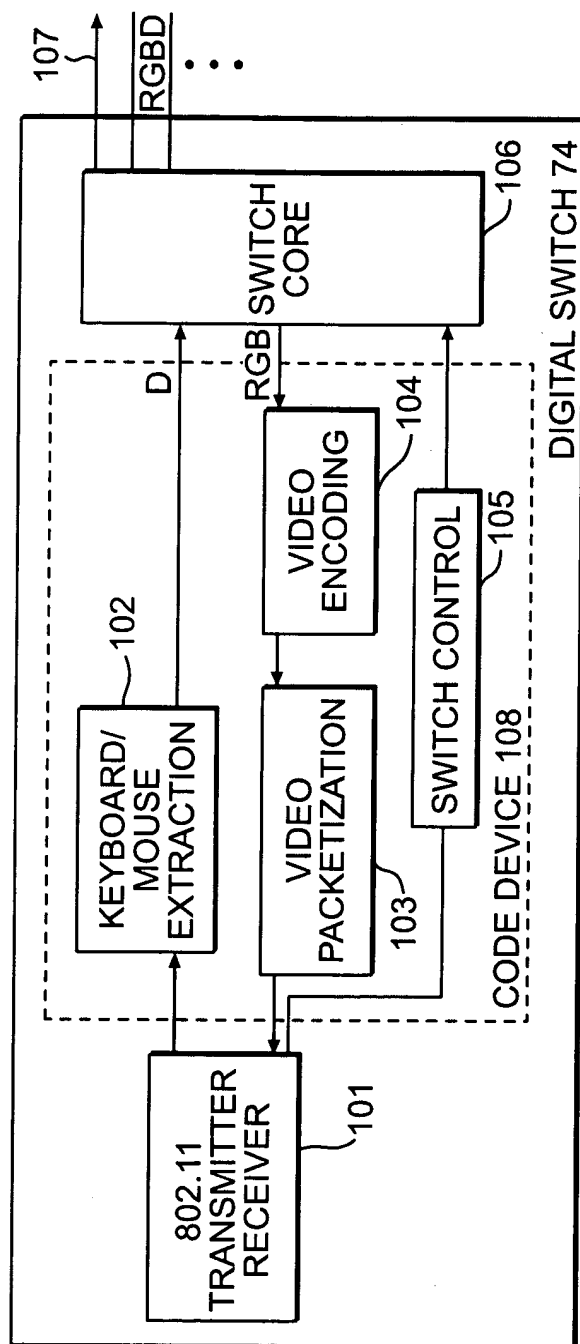


**FIG. 8**

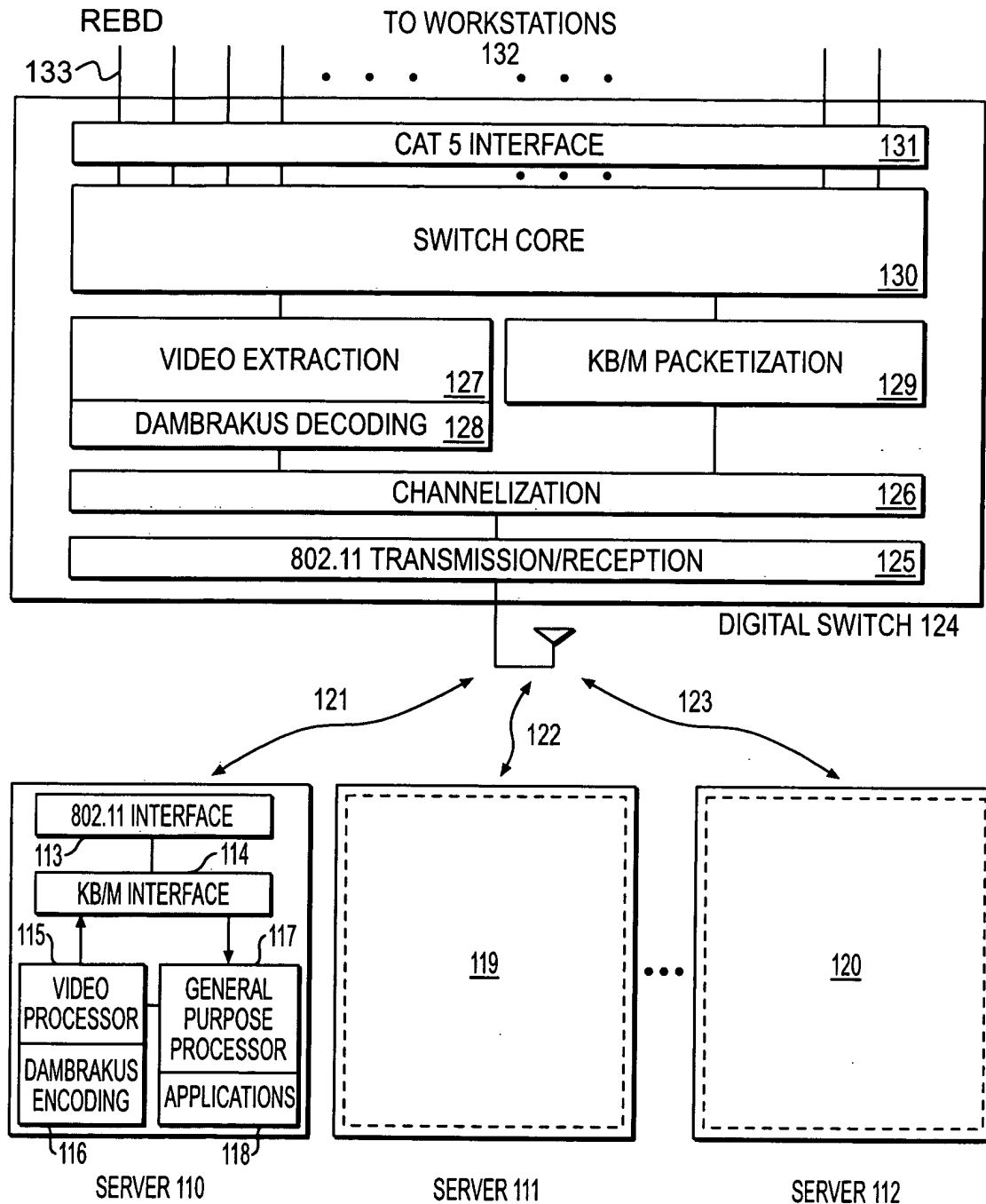




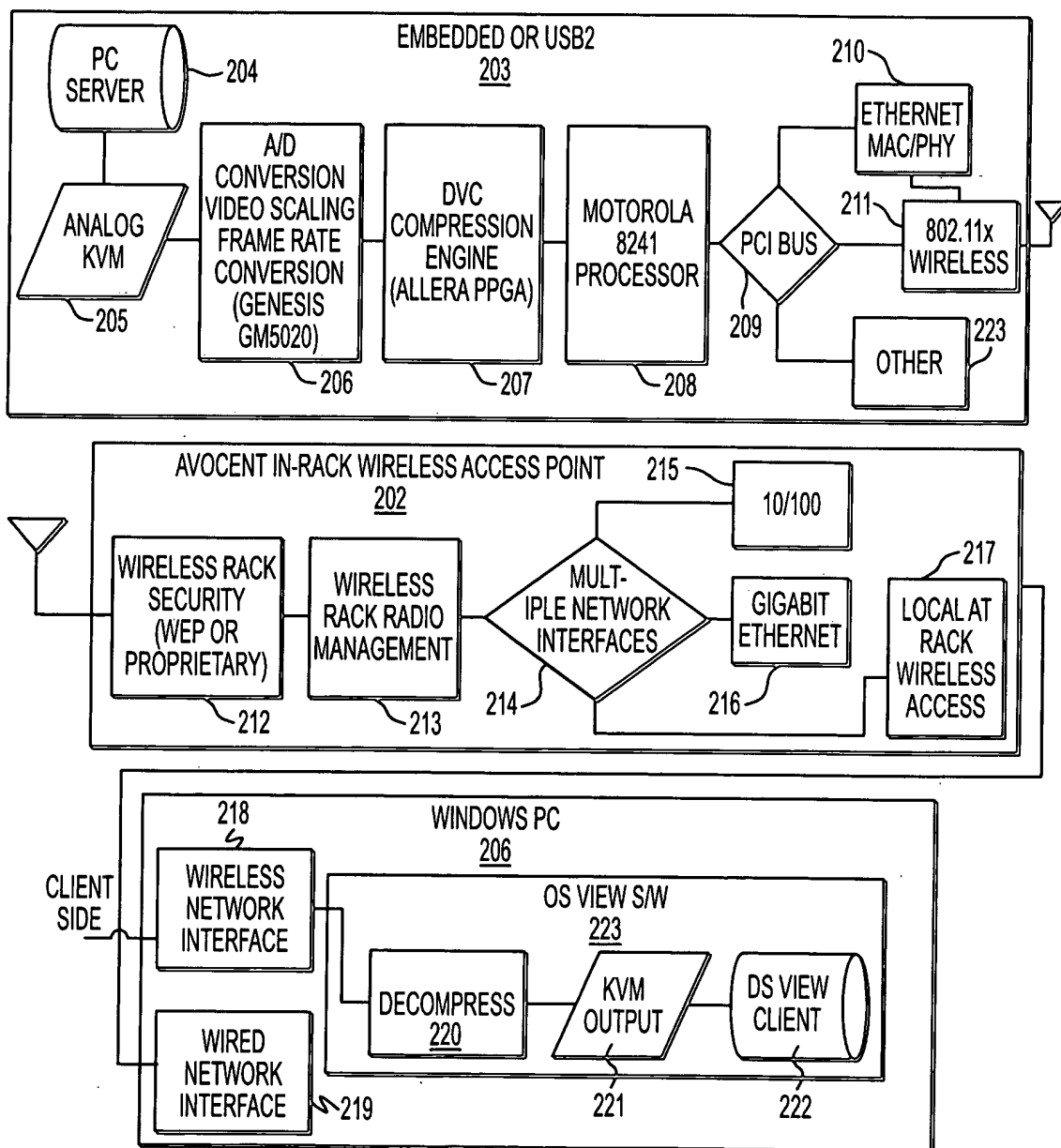
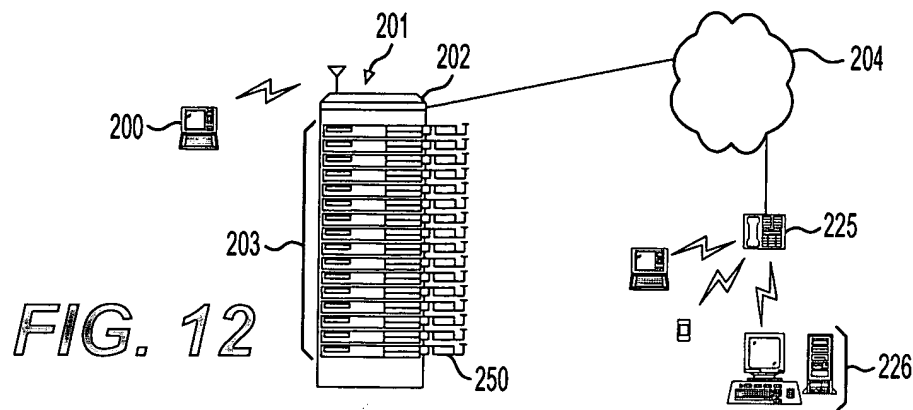
**FIG. 9**



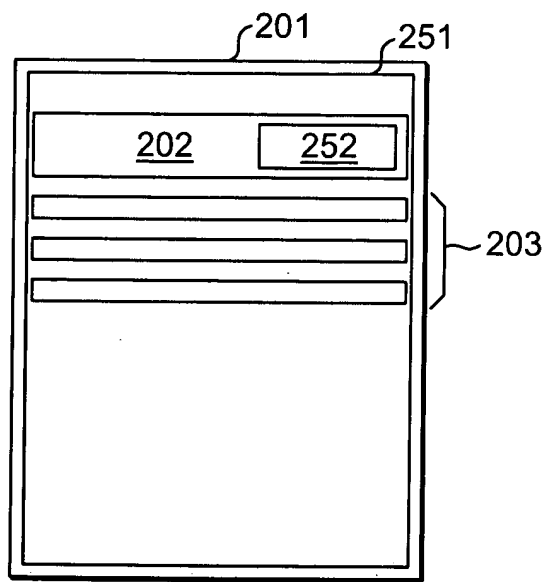
**FIG. 10**



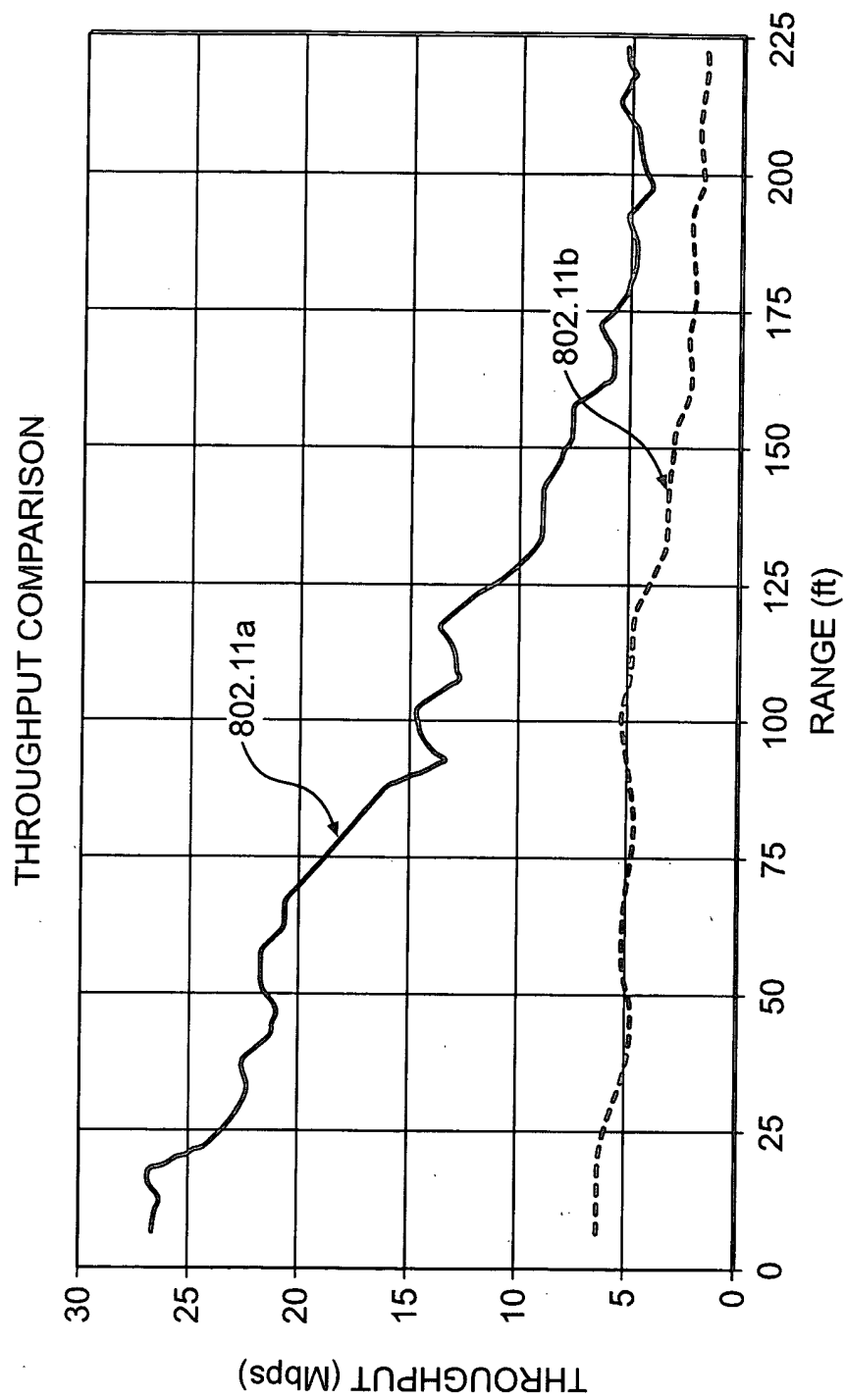
**FIG. 11**



**FIG. 13**



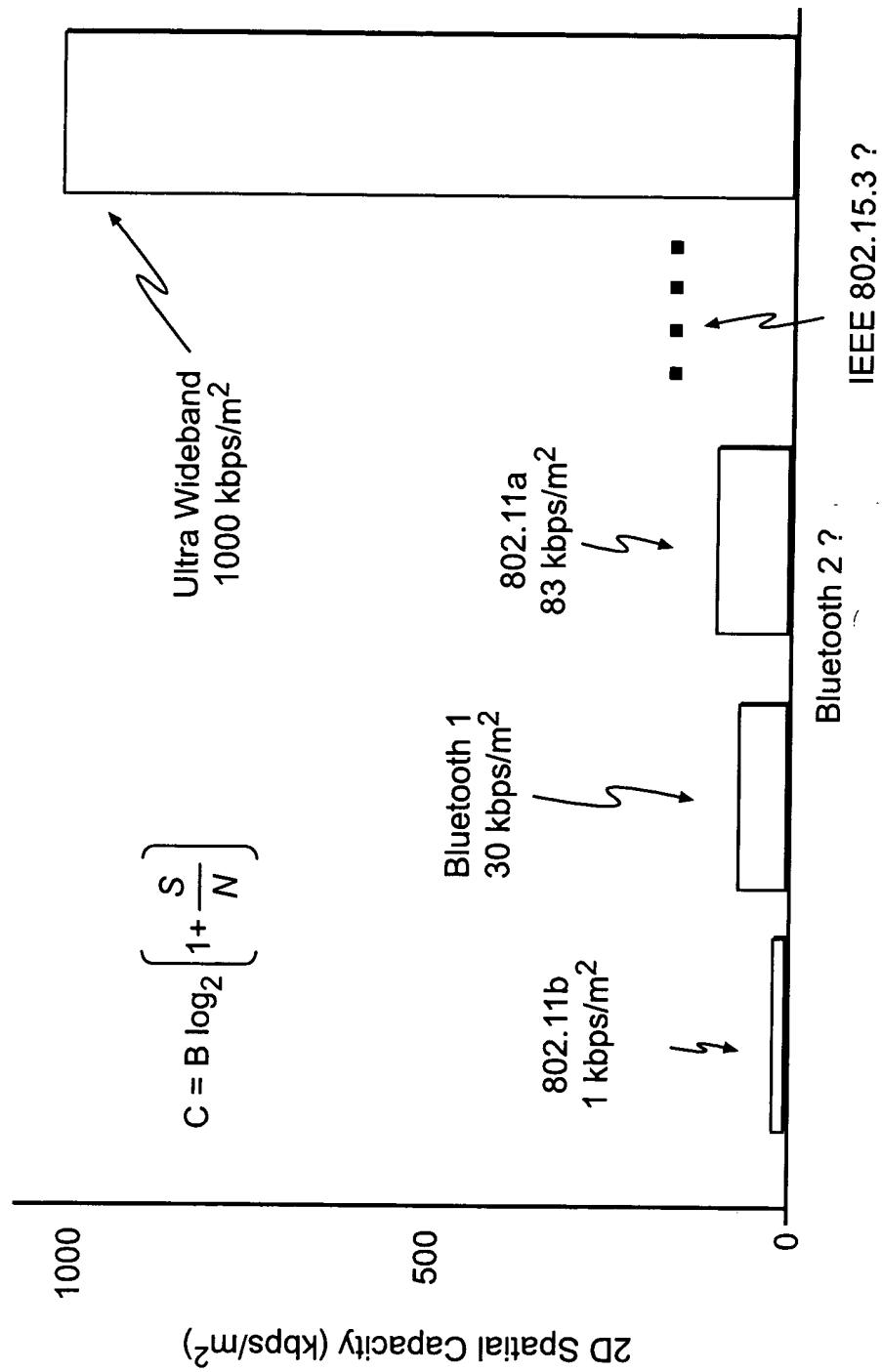
**FIG. 14**



**FIG. 15**

<b>Industry Market Consortium</b>	<b>Bluetooth</b>	<b>WiMedia</b>	
<b>IEEE Standard</b>	802.15.1	802.15.3	SG3a
<b>Frequency Band</b>	2.4 GHz	2.4 GHz	UWB 2.5 to 10 GHz
<b>Data Rate (Mbps)</b>	Up to 1 Mbps	Up to 55 Mbps	110 Mbps at 10m 200 Mbps at 4m Path to 400 Mbps
<b>BOM Cost to Manufacturer</b>	\$7-\$10 2004 est. \$5	2004 est. \$25	2004 est. \$30 2005 est. \$15
<b>Typical Range</b>	10 meters	10 meters	10 meters
<b>Current Drain (mA)</b>	<30mA	<80mA	<150mA

**FIG. 16**



**FIG. 17**